HATCH MECHANISM MALFUNCTION

OBJECTIVE:

Identify failed hatch mechanism.

LOCATION:

Installed: U.S. Common Hatch Rib side

Stowed: None

DURATION:

30 minutes

TOOLS REQUIRED:

None

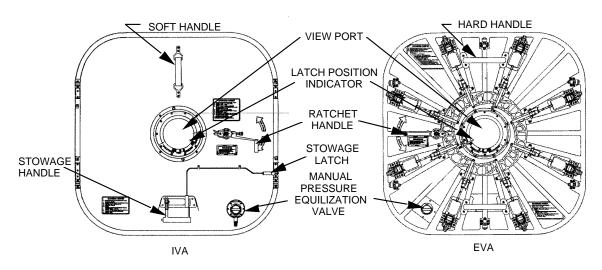


Figure 1.- Dome/Rib.

WARNING

To ensure crew members have immediate ingress/egress between modules in case of emergency, hatch latches are open.

REMOVE

- 1. Close, but do not place Hatch against bulkhead.
- 2. Check Hatch for obvious bent or broken parts.
- 3. If no defect found Continue with procedure

If defect found

Use appropriate maintenance procedure

NOTE

The next steps are to exercise hatch mechanism while attempting to identify failed ORU.

- 4. Cycle hatch crank back and forth to attempt to identify failed ORU.
- 5. If unable to identify failed ORU Continue with procedure

If able to identify failed ORU
Use appropriate maintenance procedure

- 6. Disconnect tension rods (eight) from drive mechanism by removing pip pins.
- 7. Secure loose ends of tension rods (eight) away from drive mechanism. Use tape to secure loose ends.
- 8. Cycle crank.
- 9. If crank does not bind, jam or have any other defect Continue procedure

If crank does bind, jam, or have any other defect
Attempt to identify if pinion gear or drive mechanism failed

10. If pinion gear is failedRemove and replace Hatch

If pinion gear is not failed

Remove and replace hatch drive mechanism

NOTE

After each installation of tension rod, the hatch crank is cycled to determine if newly installed tension rod/latch assembly is defective.

- 11. Install tension rods one at a time (eight), cycle hatch crank after each installation to determine if it is failed.
- 12. If failed tension rod/latch assembly determined, label failed tension rod/latch assembly.
- 13. Remove, repair, replace failed tension rod/latch assembly.